Data sheet

Shirla

All in one - fully automatic cable sheath testing and fault location system

This new revolutionary and unique device is used for cable and cable sheath testing, fault prelocation as well as for sheath fault pin pointing according to the step voltage method.

The special measuring bridge performs measurements according to Murray and Glaser methods. With the integrated high voltage DC source, ***shirla*** can prelocate low and high resistive cable faults. The measuring principle enables the prelocation of cable sheath faults and earth faults on unshielded cables. Analyses are done automatically and the results are displayed digitally.
For cable fault pin pointing according to the step voltage method, ***shirla*** applies a defined DC pulse pattern and the step voltage can be picked up by using the KMF1 or UL receiver set.

Main features

- Cable and cable sheath testing up to 10kV
- Resistance measurement
- Cable and cable sheath fault prelocation with high precision measuring bridge
- Definable cable sections with individual adjustable length, cross section and conductor material
- Cable sheath fault pin pointing
- Integrated discharge unit
- Step-less voltage adjustment
- Automatic reporting function
- Mains and battery operated
- Menu control via one button operation
- Timer function for testing and switch-on delay time

Technical data

Mains supply	110 V_{AC} … 240 V_{AC}, 50 Hz / 60 Hz
Max. power consumption	Max. 200 VA
Display	Illuminated digital LCD display, automatic adjustment of brightness, 320 x 240 dots
Testing	
Output voltage	0 – 10 kV
Output current	10 mA @ 5 kV, 5 mA @ 10 kV
Resolution	1 µA
Resistance measurement	Yes
Voltage and current limitation	Yes
Cable sheath fault prelocation	
Measuring technique	4 wire bridge according to Murray and Glaser
Measuring voltage	Up to 10 kV
Measuring current	Max. 50 mA
Accuracy	± 0,1%
Measuring sequence	Fully automatic balancing and measuring procedure
Definable cable sections	50 sections
Voltage and current limitation	Yes
Cable sheath fault pin pointing	
Pulse voltage	100V – 10kV
Output current	Max. 700 mA
Pulse code	Three selectable pulse patterns
General	
Battery operation	Integrated rechargeable battery Battery operation for all applications
Reporting function	For testing and prelocation via USB 2.0 port
Working temperature	-20°C....+50°C
Storage temperature	-40°C....+60°C
Max. relative humidity	not condensing
Dimension (in mm)	Approx. 440 x 490 x 220mm (L x H x W)
Weight including accessories	< 20 kg

Delivery includes:

- Cable sheath testing and fault location system ***shirla***
- HV connection lead
- 4-wire bridge connection cable
- Connection Clamps
- Short circuit cable sets for bridge connection technique
- Ground cable
- Mains cable
- USB memory stick
- Shoulder strap
- User manual

Accessories necessary for cable sheath fault pinpointing using the step voltage method:

- KMF 1 receiver including earth spikes and connecting cables
  or
- Accessories set for cable sheath fault pinpointing, including earth spikes and connecting cables (for use with existing Universal Locator UL 20 or UL 30)

Option

- Discharge and grounding rod EES 40